

IN THE SPECIFICATION

Please amend the paragraph beginning on page 3, at line 7, as follows:

In addition, a quoit like morphological filter used to extract an isolated shadow is described in "Study on Automatic Lung Cancer Lesion Recognition Using 3D Morphological Filter" (Masato Nakayama et al., Proceedings of Japanese Society of Medical Imaging Technology 95, pp. ~~155-164~~60—67 (1995)). This technique uses a Q filter expressed by a combination of a D filter (Disk Filter) having a radius r_1 and an R filter (Ring Filter) having inner radii r_2 and r_3 . This transform is called Q transform. More specifically, Q transform is the processing of subtracting the pixel value obtained after Dilation using the R filter from the pixel value obtained after Dilation using the D filter. The processing of performing Q transform of an image after Q transform will be referred to as inverse Q transform. The relationship between Q transform and inverse Q transform is similar to that between Fourier transform and inverse Fourier transform. This is because, Q transform can be regarded as a process of extracting a Q filter component in an image, and inverse Q transform can be regarded as a process of inversely transforming the extracted component to express it in the original image space.